



**Installation and
Maintenance Manual
For OtN Series 2000
Gearmotors and
Reducers**

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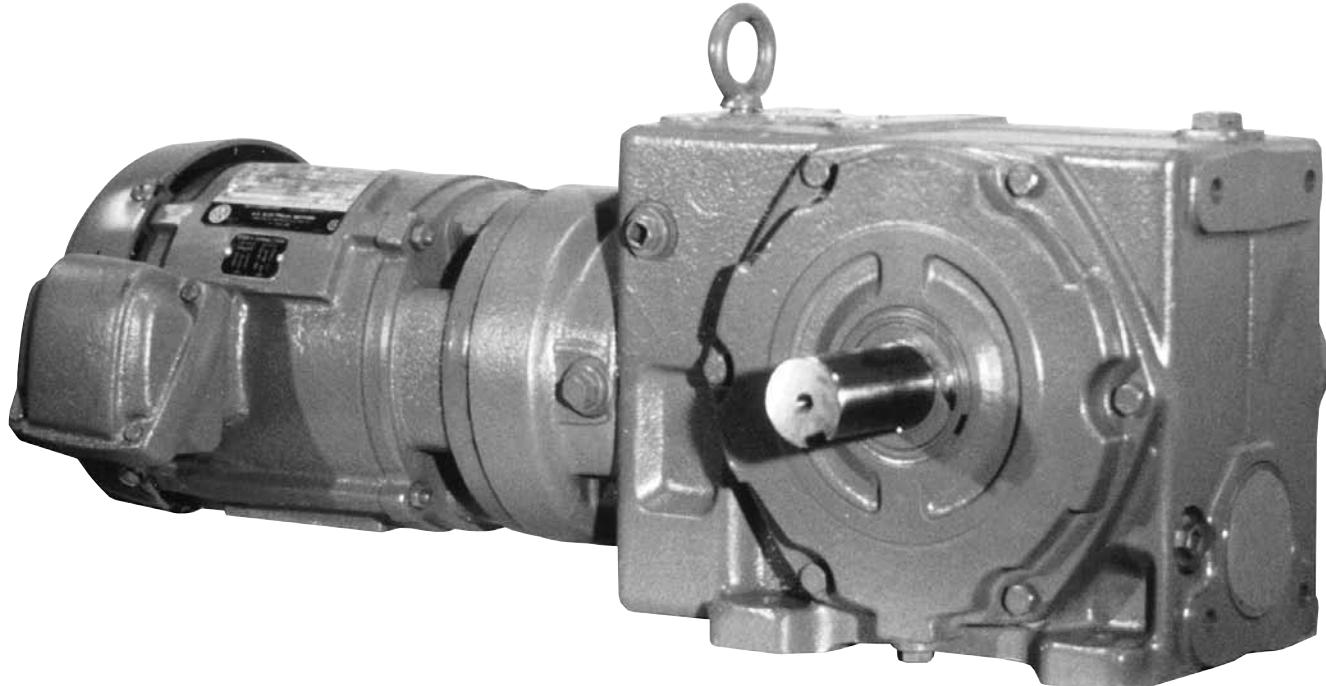
F O R M
8608
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⚠ WARNING

- Disconnect and lock-out power before installation and maintenance. Working on or near energized equipment can result in severe injury or death.
- Do not operate equipment without guards in place. Exposed equipment can result in severe injury or death.
- Read and follow all instructions carefully.

⚠ CAUTION

- Periodic inspections should be performed. Failure to perform proper maintenance can result in premature product failure and personal injury.



Installation Instructions

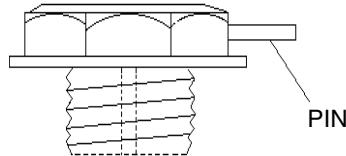
Start-Up

Before operating the reducer or gearmotor, the following must be done:

- Install the drive on a rigid and vibration-free surface.
- Remove the protective coating on the shaft and flange. Use solvent if necessary.
- Carefully install coupling, sheaves, sprockets, or pinions on shaft. Mount as close to the shaft shoulder as possible.
- It is preferable to use heat instead of force. **Do not hammer on shaft!**
- Check shaft alignment when using direct coupling.
- Check shaft parallelism when using belt or chain drive.

CAUTION: Refer to belt manufacturer's recommendation for belt tension.
(Tension should not be applied on chain drives.)

- Check oil level in oil lubricated reducer.
- Install breather plug in the plug hole per recommendations shown on page (3). **Remove pin from center of breather plug if breather design is per diagram below.**



- Reducer breathers not supplied with cross-pin do not get modified but must be properly positioned at the top of the reducer.
- For motor/coupling mounting of reducers with one piece splined couplings, refer to instructions included on page 6 of this manual.

Maintenance

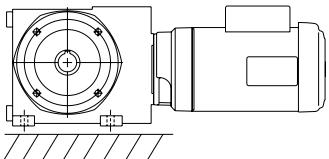
To ensure safe operation and to avoid problems, it is recommended the reducer or gearmotor be inspected **every 50 hours** of operating time.

- Check mounting bolts and belt tension (if applicable).

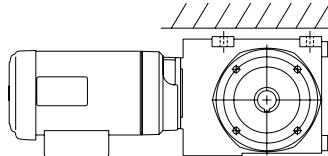
The preventative maintenance list below should be performed **every 5000 hours** of operating time:

- Check oil level and add oil if necessary.
- Make sure the vent hole in the breather is clean.

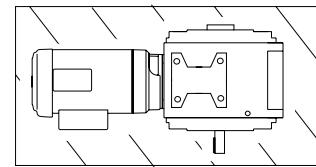
1) Gearbox Position (defined by a letter)



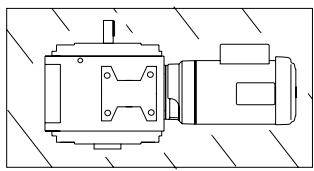
B: Floor Mounting



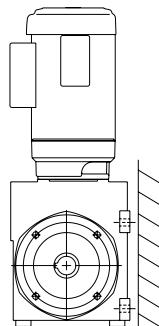
P: Ceiling Mounting



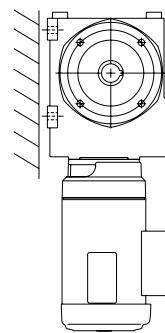
H: Wall-mounting, input on the left



T: Wall-mounting, motor on the right



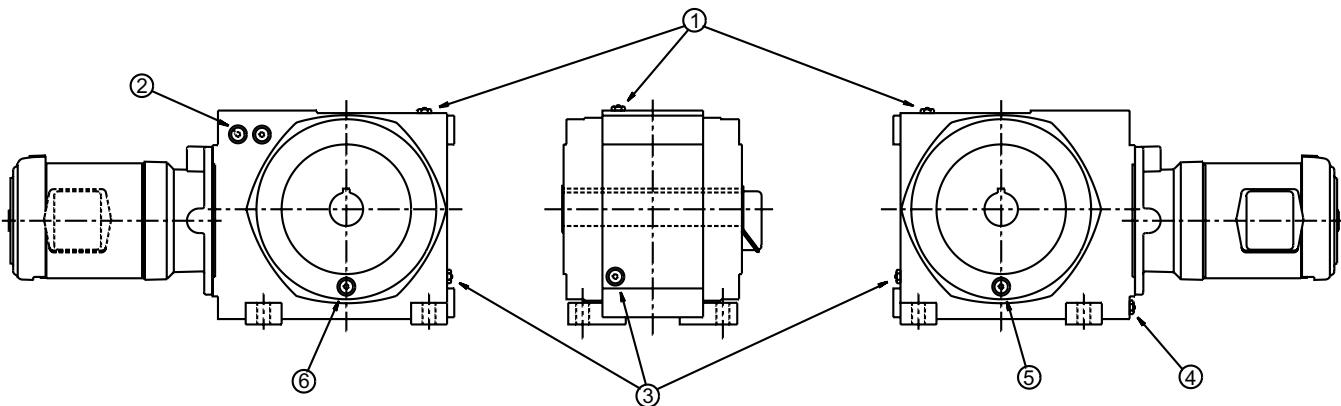
V: Wall-mounting, motor above



W: Wall-mounting, motor below

Position of Plugs and Breathers

| | B | P | H | T | V | W |
|----------|----------|----------|----------|----------|----------|----------|
| Fill | 1 | 4 | 5-4 | 6-2 | 4 | 3 |
| Breather | 1 | 4 | 5-4 | 6-2 | 4 | 3 |
| Level | 3 | 3 | 4 | 3 | 2 | 5 |
| Drain | 4 | 1 | 6 | 5 | 3 | 4 |





OtN Series 2000

Gearmotors and Reducers

Series 2000 OtN gearing is shipped with one of the following synthetic lubricants per the table below and fitted with a magnetic drain. Each reducer is filled according to the mounting position specified when ordered. Refer to unit nameplate and the chart to the left for mounting position arrangement for your unit.

In the case of synthetic oil, the lubricant does not require changing but it is recommended that proper oil level be checked periodically.

Standard Synthetic Gear Oil

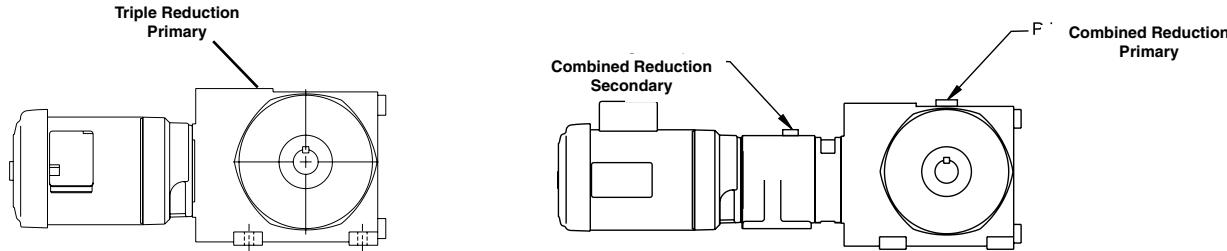
| No Backstop | |
|--------------|---------------------------------------|
| Manufacturer | -25° F to 125° F (-30° C to 50° C) |
| Fuchs® | Sintogear® 125 |
| Mobil® | SHC 629 |
| Shell® | Omala® Fluids HD 150 |

| With Backstop | |
|---------------|---------------------------------------|
| Manufacturer | -25° F to 125° F (-30° C to 50° C) |
| Shell | Omala RL 100 |

CAUTION: Never mix synthetic oil and mineral oil. Never use extreme pressure (EP) oil in a reducer with a backstop.

Acceptable Mineral Oil Lubricants

| -4°F to 14°F (-20°C to 10°C) | Ambient Range of Installation | | | | | 122°F and Above (50°C +) | |
|---------------------------------|-------------------------------|---------------|------------|------------|------------|-----------------------------|--|
| | 14°F to 122°F (-10°C to 50°C) | | | | | | |
| | No Backstop | With Backstop | ISO VG 150 | ISO VG 220 | ISO VG 150 | | |
| ISO VG 68 | ISO VG 100 | | | | ISO VG 150 | ISO VG 320 | |

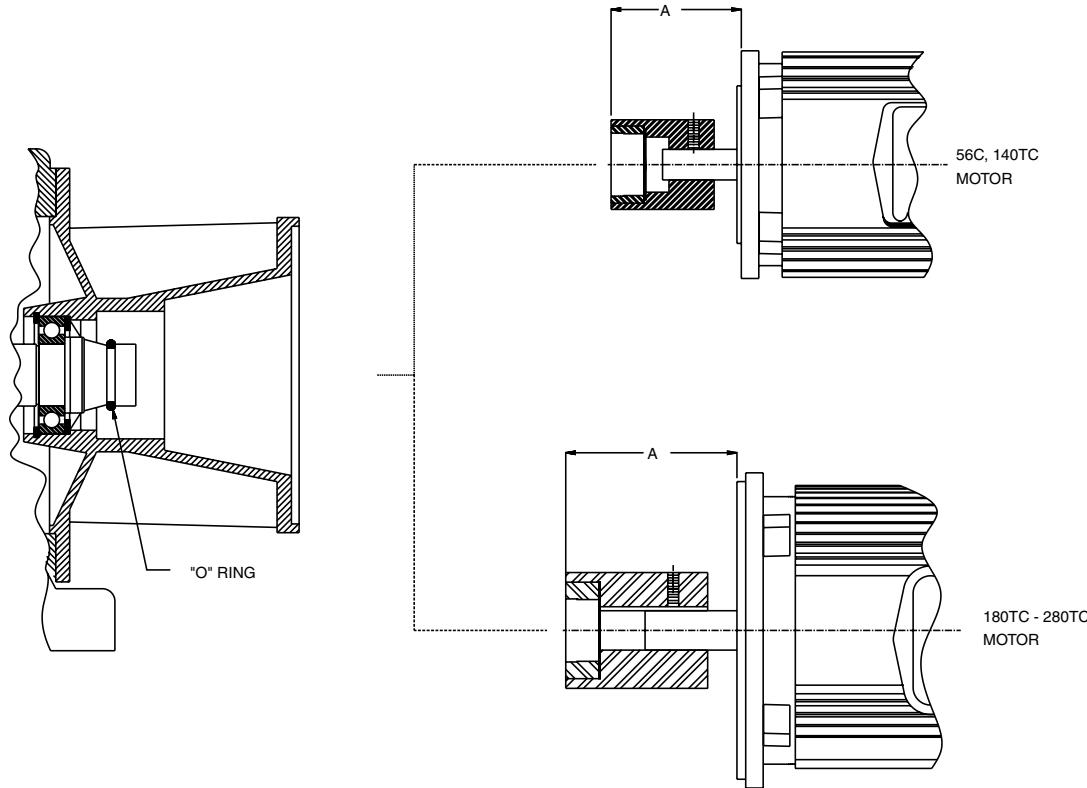


Triple Reduction and Combined (U.S. Quarts)

| Gear Frame Size | Mounting Positions | | | | | | | | | | | |
|-----------------------|--------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | B | | P | | H | | T | | V | | W | |
| | Prim. | Sec. | Prim. | Sec. | Prim. | Sec. | Prim. | Sec. | Prim. | Sec. | Prim. | Sec. |
| 2203 | 0.40 | — | 1.80 | — | 1.50 | — | 1.30 | — | 1.60 | — | 1.10 | — |
| 2303/2305 | 1.00 | 0.40 | 5.00 | 0.40 | 5.50 | 0.40 | 5.50 | 0.40 | 6.00 | 1.26 | 3.50 | 1.17 |
| 2306 | 1.00 | 0.27 | 5.00 | 0.27 | 5.50 | 0.27 | 5.50 | 0.27 | 6.00 | 1.16 | 3.50 | 1.15 |
| 2403/2405 | 1.50 | 0.40 | 9.00 | 0.40 | 9.00 | 0.40 | 9.60 | 0.40 | 10.00 | 1.28 | 5.50 | 1.17 |
| 2406 | 1.50 | 0.27 | 9.00 | 0.24 | 9.00 | 0.27 | 9.60 | 0.27 | 10.00 | 1.16 | 5.50 | 1.15 |
| 2503/2505 | 3.00 | 0.40 | 17.00 | 0.40 | 19.00 | 0.40 | 18.00 | 0.40 | 20.00 | 1.26 | 11.50 | 1.17 |
| 2506 | 3.00 | 0.27 | 17.00 | 0.27 | 19.00 | 0.27 | 20.00 | 0.27 | 20.00 | 1.16 | 11.50 | 1.15 |
| 2603/2605 | 4.50 | 0.54 | 28.50 | 0.54 | 28.50 | 0.54 | 28.50 | 0.54 | 30.0 | 2.11 | 16.00 | 1.84 |
| 2606 | 4.50 | 0.50 | 28.50 | 0.50 | 28.50 | 0.50 | 28.50 | 0.50 | 30.0 | 2.00 | 16.00 | 1.80 |
| 2703/2705 | 6.00 | 1.67 | 39.00 | 1.67 | 37.00 | 1.67 | 40.00 | 1.67 | 42.0 | 4.40 | 21.00 | 4.40 |
| 2706 | 6.00 | 1.50 | 39.00 | 1.50 | 37.00 | 1.50 | 40.00 | 1.50 | 42.0 | 4.54 | 21.00 | 4.44 |
| 2803/2805 | 11.50 | 2.60 | 78.00 | 2.60 | 76.00 | 2.60 | 82.50 | 2.50 | 83.0 | 8.30 | 72.50 | 8.00 |
| 2806 | 11.50 | 2.30 | 76.00 | 2.30 | 76.00 | 2.30 | 82.50 | 2.30 | 83.0 | 8.00 | 72.50 | 7.80 |

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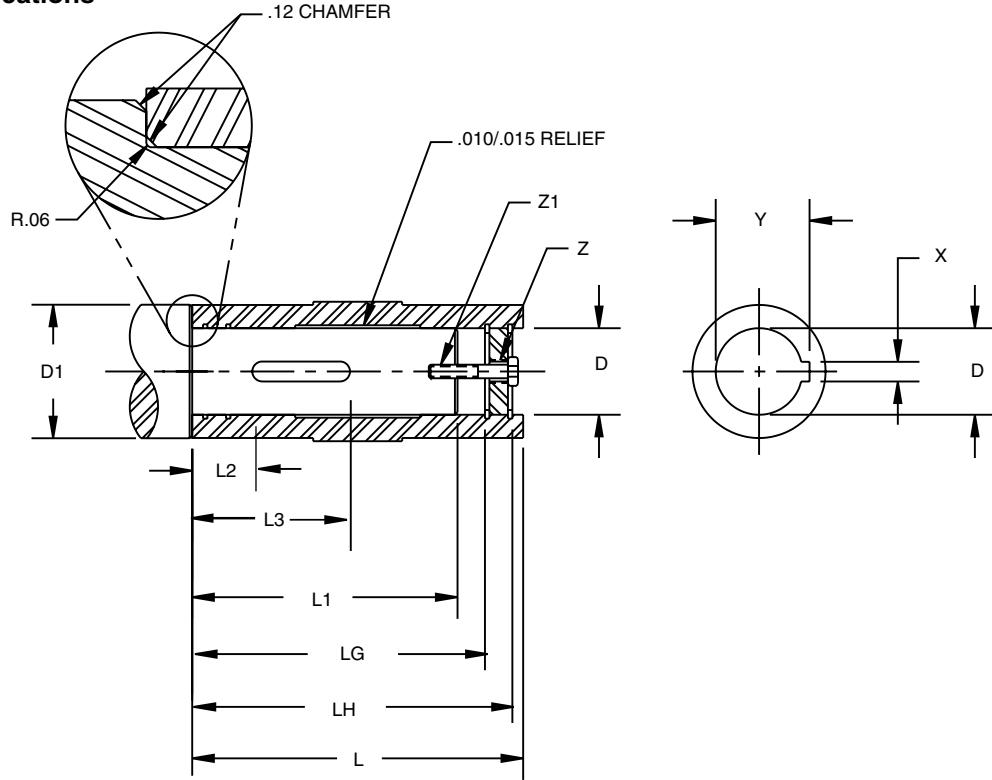
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One-Piece Splined Coupling (Type UE and U)

Notes:

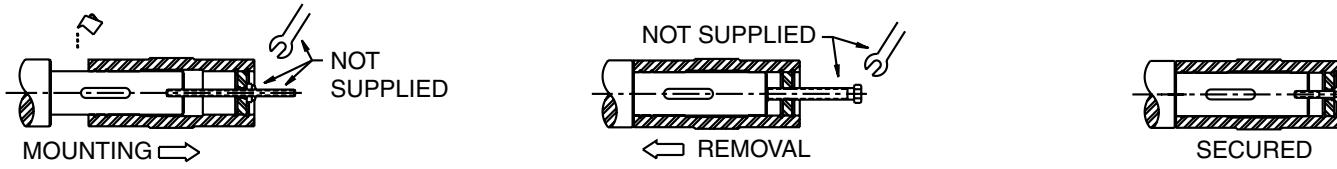
1. Install motor shaft key onto motor shaft.
2. Lubricate spline teeth of coupling and input shaft with Mobil grease XTC or equivalent coupling grease.
3. Install coupling onto motor shaft and set to the specified distance.
Refer to table below (dimension "A") for correct setting distances.
4. Apply thread locking compound to set screw and install. Tighten into coupling.
5. Assemble motor to gear reducer engaging splined coupling and bolt the motor to the c-face.

| Input Type | Reducer Size OtN | Motor Size | A (Inches) |
|------------|---------------------|--------------|------------|
| | | | |
| UE | 22, 23 | 56C, 140TC | 3.06 |
| | | 180TC, 210TC | 4.04 |
| UE | 24, 25 | 56C, 140TC | 3.12 |
| | | 180TC, 210TC | 4.11 |
| | | 250TC | 4.75 |
| | | 280TC | 5.64 |
| U | 26 | 140TC | 3.86 |
| | | 180TC, 210TC | 5.34 |
| | | 250TC | 5.34 |
| | | 280TC | 6.31 |

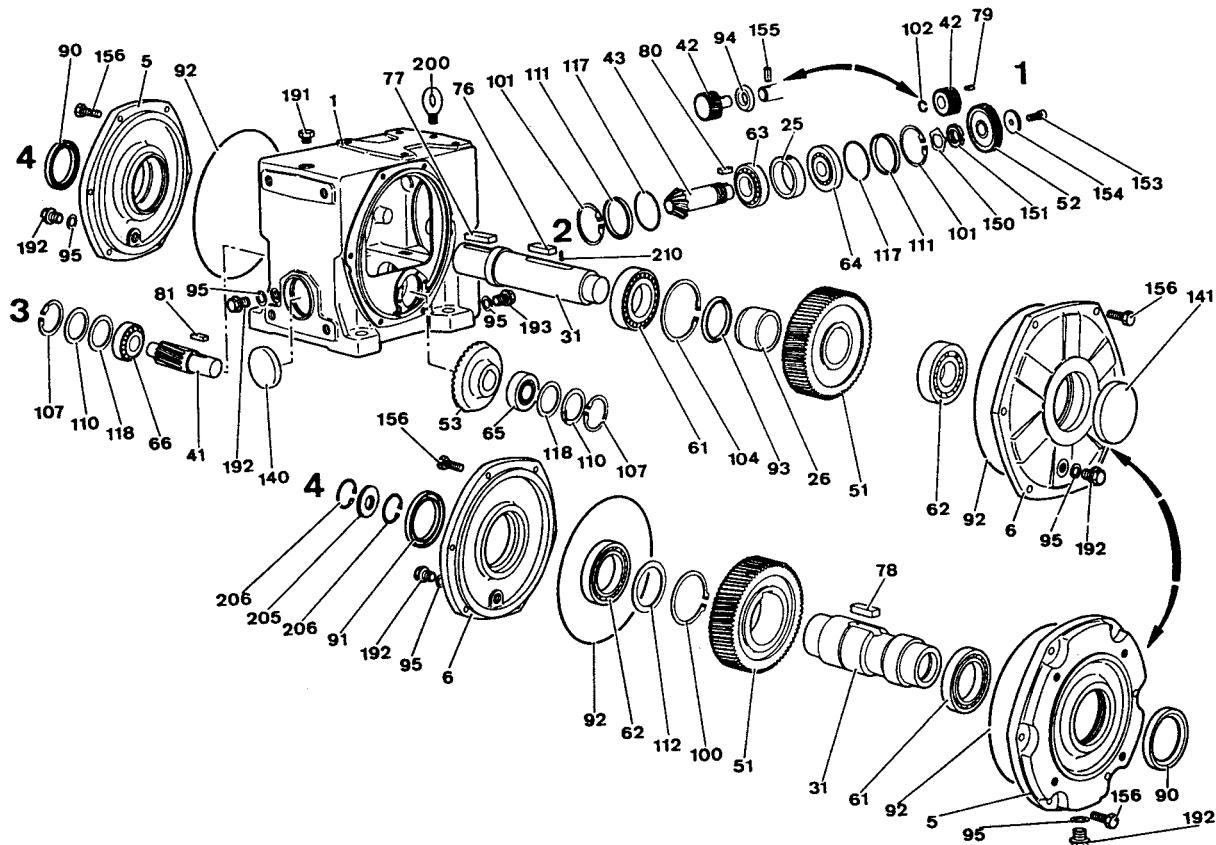
Driven Shaft Specifications



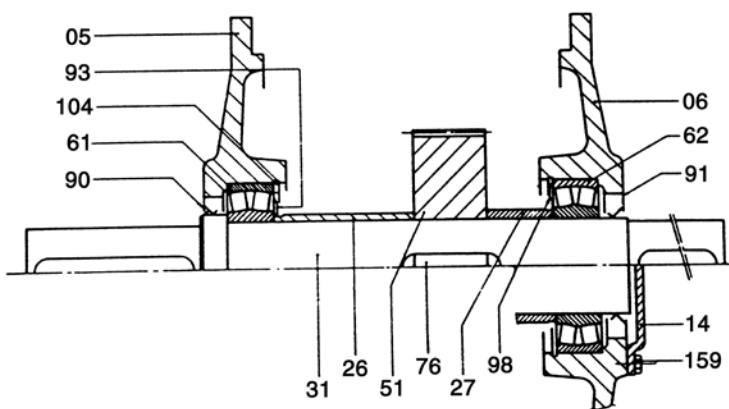
| Gear Frame | Hollow Shaft | | | | | | Driven Shaft | | | | | |
|------------|--------------|-------|-------|--------|-------|-------|---------------|------|-------|------|------|--------|
| | L | LG | LH | X | Y | Z UNC | D +.000 -.001 | D1 | L1 | L2 | L3 | Z1 UNC |
| 22 | 5.83 | 4.78 | 5.22 | 0.3125 | 1.531 | 5/8 | 1.375 | 1.75 | 4.69 | 1.00 | 2.75 | 1/2 |
| 23 | 8.30 | 7.20 | 7.75 | 3/8 | 1.600 | 1 | 1.437 | 2 | 7.10 | 1.00 | 3.75 | 5/8 |
| 24 | 9.90 | 8.60 | 9.39 | 1/2 | 2.061 | 1 | 1.875 | 2.45 | 8.25 | 1.00 | 5.00 | 5/8 |
| 25 | 11.65 | 10.12 | 11.06 | 5/8 | 2.646 | 1 | 2.375 | 2.85 | 9.85 | 1.25 | 6.25 | 3/4 |
| 26 | 12.20 | 10.63 | 11.54 | 5/8 | 3.027 | 1 1/4 | 2.750 | 3.35 | 10.25 | 1.25 | 6.25 | 3/4 |
| 27 | 13.40 | 11.81 | 12.72 | 3/4 | 3.454 | 1 1/4 | 3.125 | 3.75 | 11.40 | 1.25 | 7.25 | 3/4 |
| 28 | 16.90 | 15.12 | 16.14 | 7/8 | 4.009 | 1 1/4 | 3.625 | 4.35 | 14.95 | 1.50 | 7.50 | 1 |



Mounting Information



Double output shaft (left and right side)





OtN Series 2000

Gearmotors and Reducers

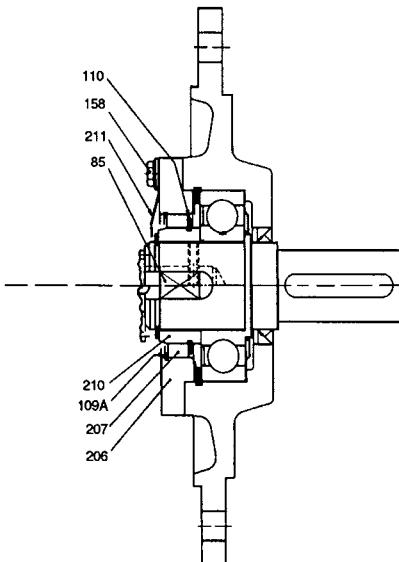
OtN Part List

| Part # | Description | Qty. |
|---------|---|--------|
| 001 | Housing Pre-assembly * | 1 |
| 005 | Endshield, Output Side | 1 |
| 006 | Endshield, Opposite Side | 1 |
| 014 | Cover | 1 |
| 025 | Spacer, Axis 2 | 1 |
| 026 | Spacer (Output shaft on left side) | 1 |
| 027 | Spacer (Output shaft D or X*) | 1 |
| 031 | Output Shaft | 1 |
| 041 | Pinion Axis 3 | 1 |
| 042 | Pinion Axis 1, Motor Shaft | 1 |
| 043 | Bevel Pinion, Axis 2 | 1 |
| 044 | Pinion Shaft Axis 2 | 1 |
| 051 | Wheel Axis 4 | 1 |
| 052 | Wheel Axis 2 | 1 |
| 053 | Wheel Axis 3 | 1 |
| 061 | Bearing Axis 4, Left | 1 |
| 062 | Bearing Axis 4, Right | 1 |
| 063 | Bearing Axis 3, Front | 1 |
| 064 | Bearing Axis 3, Rear | 1 |
| 065 | Bearing Axis 2, Right | 1 |
| 066 | Bearing Axis 2, Left | 1 |
| 076-078 | Key, Wheel (key for hollow shaft wheel) | 1 |
| 077 | Key | 1 |
| 079 | Key, Motor Shaft | 1 or 2 |
| 080 | Key, Axis 2 | 1 |
| 081 | Key, Axis 3 | 1 |
| 090 | Seal, Output Side | 1 |
| 091 | Seal, Opposite Side | 1 |

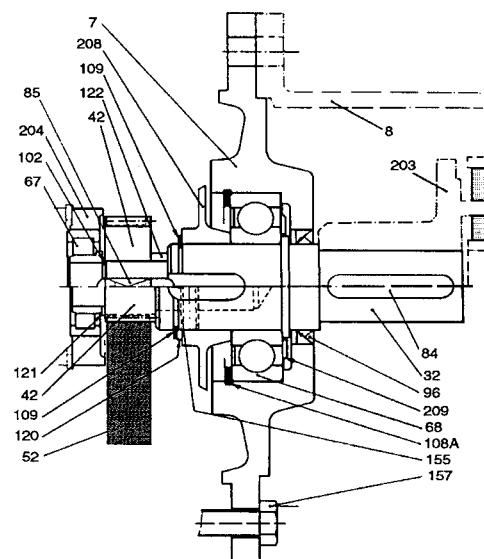
| Part # | Description | Qty. |
|---------|---------------------------------------|------|
| 092 | "O" Ring Seal | 2 |
| 093 | Seal | 1 |
| 095 | Plug Seals | 4 |
| 098 | Seal | 1 |
| 100 | Retaining Ring, Hollow Shaft (Axis 4) | 1 |
| 101 | Retaining Ring, Axis 2 | 2 |
| 102 | Retaining Ring, Motor Shaft | 1 |
| 104 | Retaining Ring, Axis 4 | 2 |
| 107 | Retaining Ring Axis 2 | 2 |
| 110 | Shims, Axis 3 | x |
| 111 | Shims, Axis 2 | x |
| 112 | Spacer, Hollow Shaft (Axis 4) | 1 |
| 117 | Spacer, Axis 2 | 2 |
| 118 | Spacer, Axis 3 | 2 |
| 140 | Cup Plug, Axis 2 | 1 |
| 141 | Cup Plug | 1 |
| 220+151 | Nut and Washer | 1 |
| 153 | Screw (Wheel) | 1 |
| 154 | Washer, Inout Wheel | 1 |
| 155 | Pin, Shaft Pinion | 1 |
| 156 | Bolts, Journal Securing | 12 |
| 159 | Fixing Bolt, Cover 014 | 4 |
| 191 | Filling Plug | 1 |
| 192 | Level Plug | 1 |
| 193 | Magnetic Drain Plug | 1 |
| 200 | Lifting Plug | 1 |
| 205 | Hollow Shaft Threaded Washer | 1 |
| 206 | Extractor Retaining Ring | 2 |
| 210 | Pin | 1 |

* With bevel set and final pinion

| Size | Shaft | Rep. | | | | | | | | |
|------|-------|----------|----------|---------|---------|---------|-------|---------------|---------------|-------|
| | | 061 | 062 | 063 | 064 | 065 | 066 | 090 | 091 | 092 |
| 2203 | G - D | 6010 2RS | 6010 2RS | 30204 | 30304 | 32004 | 32004 | 50x80x13 BASL | - | - |
| | C - X | 6010 2RS | 6010 2RS | 30204 | 30304 | 32004 | 32004 | 50x80x13 BASL | 50x80x13 BASL | - |
| 2303 | G - D | 6209 RS | NJ 205 E | | | | | | - | |
| | C | 6011 RS | 6011 RS | 32305 | 32305 | 32304 | 32304 | 55X68X8 AS | 55X68X8 AS | 185X3 |
| | X | 6209 RS | 6308 RS | | | | | | 55X68X8 AS | |
| 2403 | G - D | 22211 | NJ 208 E | | | | | | - | |
| | C | 6013 RS | 6013 RS | 30306 | 30306 | 30305 | 30305 | 65x85x13 AS | 65x85x13 AS | 240x3 |
| | X | 22211 | 22211 | | | | | | 65x85x13 AS | |
| 2503 | G - D | 22213 | 6311 | | | | | 75x100x10 AS | - | |
| | C | 6017 RS | 6017 RS | 32307 B | 32307 B | 33207 | 33207 | 85x110x12 AS | | 295x3 |
| | X | 22213 | 22215 E | | | | | 75x100x10 AS | 65x100x10 AS | |
| 2603 | G - D | 22215 E | 22215 E | | | | | 80x100x10 AS | - | |
| | C | 6019 | 6019 | 32308 | 32308 | 32308 | 32308 | 95x125x12 AS | 95x125x13 AS | 330x4 |
| | X | 22215 E | 22215 E | | | | | 75x100x10 AS | 75x100x10 AS | |
| 2703 | G - D | 22217 E | 22217 E | | | | | 95x125x12 AS | - | |
| | C | 6022 | 6022 | 32310 | 32310 | 32309 B | 32309 | 110x140x12 AS | 110x140x12 AS | 380x4 |
| | X | 32020 | 32020 | | | | | 100x125x13 AS | 100x125x13 AS | |
| 2803 | G - D | 23120 E | 23120 E | | | | | 105x130x12 AS | - | |
| | C | 6026 | 6026 | 32311 B | 32311 B | 32312 B | 32312 | 130x160x15 AS | 130x160x15 AS | 470x4 |
| | X | 32120 E | 32120 E | | | | | 110x130x12 AS | | |

OtN 27... 28

Input Shaft with Backstop

| Part # | Description | Qty. |
|--------|-----------------------|------|
| 7 | "AP" Input Flange | 1 |
| 8 | C-Face | 1 |
| 32 | Input Shaft | 1 |
| 42 | Pinion | 1 |
| 52 | Wheel | 1 |
| 67 | Bearing (Pinion Side) | 1 |
| 68 | Bearing (Shaft Side) | 1 |
| 79 | Pinion Key | 1 |
| 84 | Shaft Key | 1 |
| 96 | Oil Seal | 1 |
| 102 | Pinion Retaining Ring | 1 |
| 108A | Retaining Ring | 1 |
| 109 | Retaining Ring | 1 |
| 120 | Ring | 1 |
| 122 | Spacer | 1 |
| 128 | Ring | 1 |
| 155 | Pinion Pin | 1 |


C-Face Motor Mounting

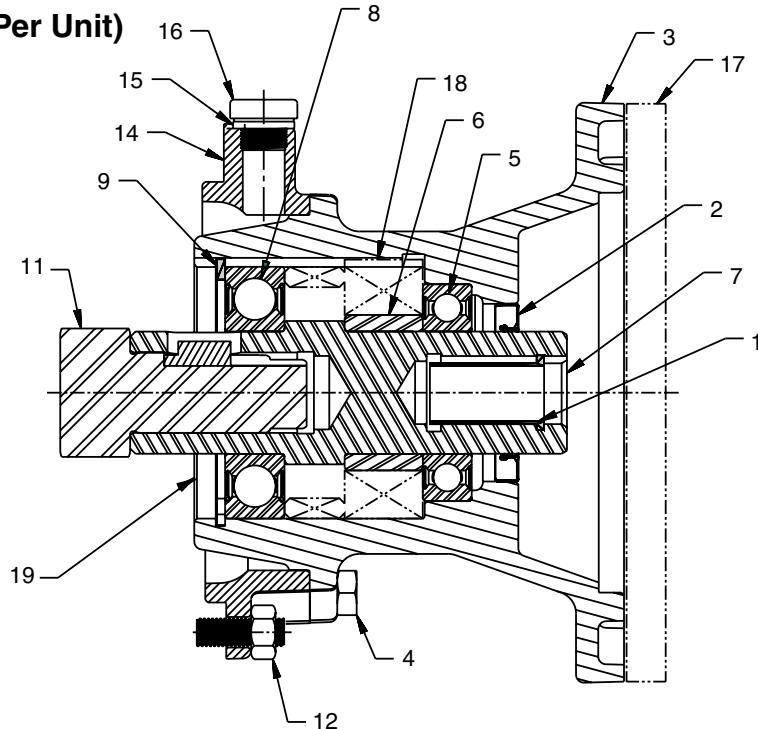
| Part # | Description | Qty. |
|--------|-------------------------|------|
| 157 | Screws | 4 |
| 203 | Coupling (Reducer Half) | 1 |
| 204 | Bearing Ring | 1 |
| 208 | Oil Deflector | 1 |
| 209 | Nilos Bearing Shield | 1 |

"AD" Backstop Kit

| Part # | Description | Qty. |
|--------|-------------------|------|
| 85 | Race Key | 1 |
| 109A | Retaining Ring | 1 |
| 110 | Retaining Ring | 1 |
| 158 | Flange Screws | 4 |
| 206 | Free Wheel Flange | 1 |
| 207 | Free Wheel | 1 |
| 211 | Oil Deflector | 1 |

Maintenance Parts

| OtN Size | C-Face Input With Coupling | | | "AP" Input Shaft | | |
|----------|----------------------------|---------|-----------------|------------------|---------|-----------------|
| | 67 | 68 | 96 | 67 | 68 | 96 |
| 27 | RO w/ratio | 6311 RS | 55 x 72 x 10 DL | RO w/ratio | 6311 RS | 55 x 72 x 10 DL |
| 28 | RO w/ratio | 6313 RS | 65 x 90 x 10 DL | RO w/ratio | 6313 RS | 65 x 90 x 10 DL |

OtN 27...28 (Quantity Per Unit)


| No. | Description | 180TC | 210TC | 250TC | 280TC | 320TC |
|-----|-----------------------|-------|-------|-------|-------|-------|
| 1 | Non-Metallic Liner | 1 | 1 | 1 | 1 | 1 |
| 2 | Seal | 1 | 1 | 1 | 1 | 1 |
| 3 | Motor Adapter | 1 | 1 | 1 | 1 | 1 |
| 4 | Capscrew | 6 | 6 | 6 | 6 | 6 |
| 5 | Bearing | 1 | 1 | 1 | 1 | 1 |
| 6 | Spacer | 1 | 1 | 1 | 1 | 1 |
| 7 | Input Shaft | 1 | 1 | 1 | 1 | 1 |
| 8 | Bearing | 1 | 1 | 1 | 1 | 1 |
| 9 | Internal Snap Ring | 1 | 1 | 1 | 1 | 1 |
| 11 | Pinion | 1 | 1 | 1 | 1 | 1 |
| 12 | Bolts | ** | ** | ** | ** | ** |
| 14 | Adapter Flange | 1 | 1 | 1 | 1 | 1 |
| 15 | Gasket | 1 | 1 | 1 | 1 | 1 |
| 16 | Plug (1/4") | 1 | 1 | 1 | 1 | 1 |
| 17 | Motor Adapter Flange | N/A | N/A | N/A | 1 | N/A |
| 18 | Backstop Kit (Option) | 1 | 1 | 1 | 1 | 1 |
| 19 | Seal | 1 | 1 | 1 | 1 | 1 |

** Depending on gear frame size: 27 = 4, 28 = 8.

Maintenance Parts

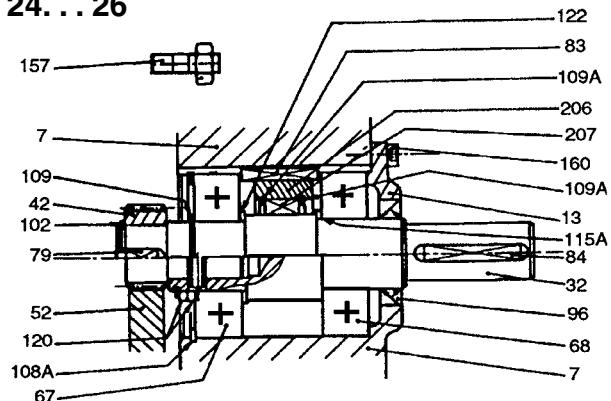
| Gear Frame | Motor Frame | Bearings | | Seal |
|------------|--------------|----------|-------|----------------------|
| | | 5 | 8 | 2 (inches) |
| All | 180TC, 210TC | 6014 2RS | NJ210 | 4.438 x 2.625 x .437 |
| All | 250TC, 280TC | 6014 2RS | NJ210 | 4.438 x 2.625 x .437 |
| All | 320TC | 6216 2RS | NJ310 | 140 x 90 x 12 (mm) |

Browning®

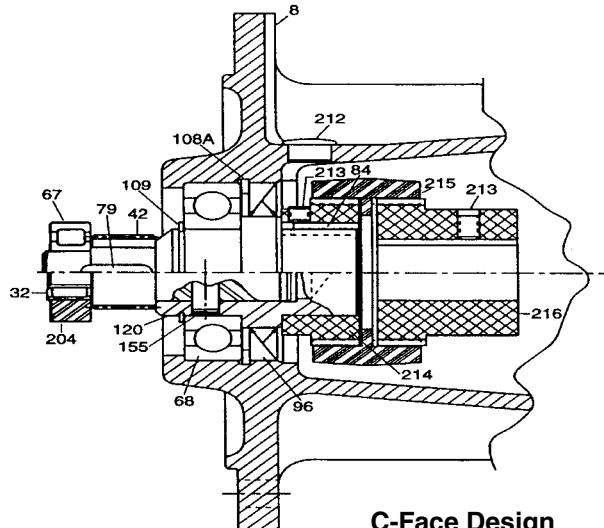
OtN Series 2000

C-Face Quill Input Reducers

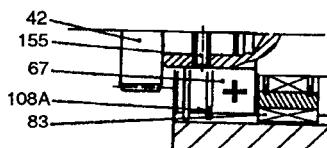
OtN 24...26



Input Shaft - Hollow Pinion



C-Face Design



Input Shaft - Solid Pinion

"AP" Input Shaft & "U" C-Face Design Part List

| Part # | Description | Qty. |
|--------|-----------------------|------|
| 007 | "AP" Input Flange | 1 |
| 008 | "U" C-Face Housing | 1 |
| 032 | Input Shaft | 1 |
| 042 | Pinion | 1 |
| 052 | Wheel | 1 |
| 067 | Bearing (Pinion Side) | 1 |
| 068 | Bearing (Shaft Side) | 1 |
| 079 | Pinion Key | 1 |
| 084 | Shaft Key | 1 |
| 096 | Oil Seal | 1 |
| 102 | Pinion Retaining Ring | 1 |
| 108A | Retaining Ring | 1 |
| 109 | Retaining Ring | 1 |
| 120 | Ring | 1 |

| Part # | Description | Qty. |
|--------|-------------------------|------|
| 122 | Spacer | 1 |
| 128 | Ring | 1 |
| 155 | Pinion Pin | 1 |
| 157 | Screws | 4 |
| 204 | Bearing Ring | 1 |
| 208 | Oil Deflector | 1 |
| 212 | Access Plug | 1 |
| 213 | Coupling Set Screw | 4 |
| 214 | Gear Half Coupling (1) | 1 |
| 215 | Flexible Connector (1) | 1 |
| 216 | Motor Half Coupling (1) | 1 |

"AD" Backstop Kit

| Part # | Description | Qty. |
|--------|-------------------|------|
| 085 | Race Key | 1 |
| 109A | Retaining Ring | 1 |
| 110 | Retaining Ring | 1 |
| 158 | Flange Screws | 4 |
| 206 | Free Wheel Flange | 1 |
| 207 | Free Wheel | 1 |
| 210 | Inner Race | 1 |
| 211 | Oil Deflector | 1 |

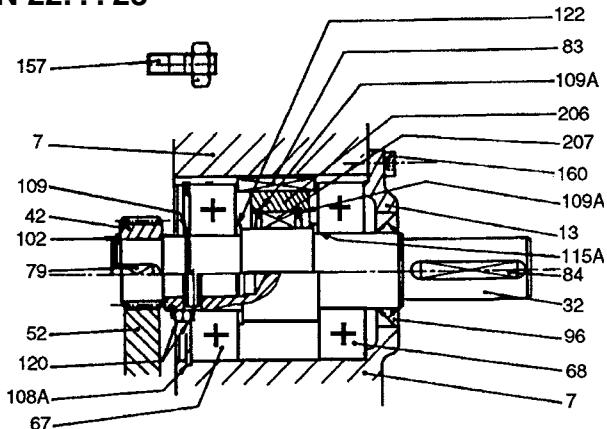
(1) Size 26, and 24 or 25 with 250 TC or 284 TC motor use one piece coupling. See Page 6.

Maintenance Parts

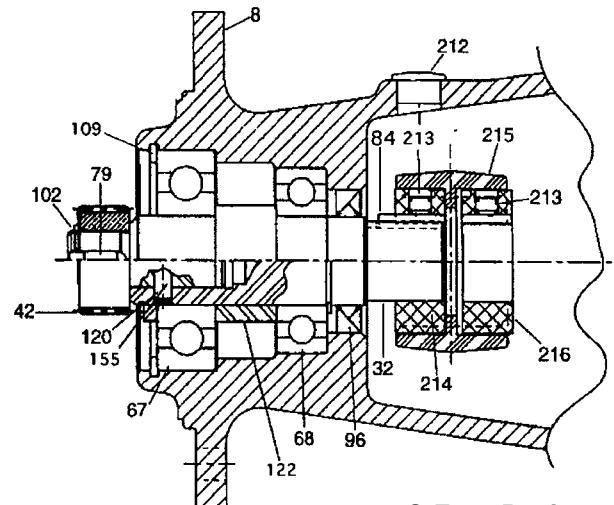
| Size | "C"-Face Input | | | "AP" Input Shaft | | | "AD" Backstop Assembly | | | |
|------|----------------|---------|-----------|------------------|----------|-----------|------------------------|----------|-----------|----------|
| | 67 | 68 | 96 | 67 | 68 | 96 | 67 | 68 | 96 | 207 |
| 24 | NJ 203 E | 6207 RS | 45x72x8 A | 6308 RS | NJ 207 E | 35x62x7 A | 6308 RS | NJ 207 E | 35x62x7 A | BWX13244 |
| 25 | NJ 203 E | 6207 RS | 45x72x8 A | 6308 RS | NJ 207 E | 35x62x7 A | 6308 RS | NJ 207 E | 35x62x7 A | BWX13244 |
| 26 | NA 4900 | 6207 RS | 45x72x8 A | 6308 RS | NJ 207 E | 35x62x7 A | 6308 RS | NJ 207 E | 35x62x7 A | BWX13244 |

Reducers

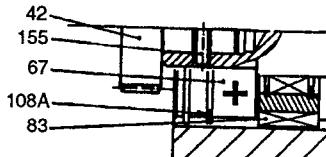
OtN 22...23



Input Shaft - Hollow Pinion



C-Face Design



Input Shaft - Solid Pinion

"AP" Input Shaft & "U" C-Face Design Part List

| Part # | Description | Qty. |
|--------|-----------------------|------|
| 007 | "AP" Input Flange | 1 |
| 008 | "U" C-Face Housing | 1 |
| 032 | Input Shaft | 1 |
| 042 | Pinion | 1 |
| 052 | Wheel | 1 |
| 067 | Bearing (Pinion Side) | 1 |
| 068 | Bearing (Shaft Side) | 1 |
| 079 | Pinion Key | 1 |
| 084 | Shaft Key | 1 |
| 096 | Oil Seal | 1 |
| 102 | Pinion Retaining Ring | 1 |
| 109 | Retaining Ring | 1 |
| 120 | Retaining Ring | 1 |

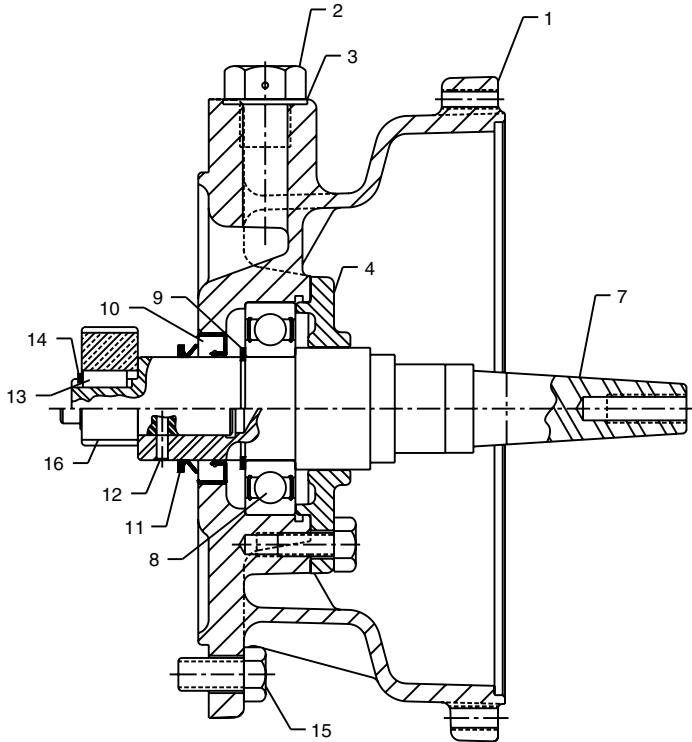
"AD" Backstop Kit

| Part # | Description | Qty. |
|--------|-------------------|------|
| 085 | Race Key | 1 |
| 109A | Retaining Ring | 1 |
| 110 | Retaining Ring | 1 |
| 158 | Flange Screws | 4 |
| 206 | Free Wheel Flange | 1 |
| 207 | Free Wheel | 1 |
| 210 | Inner Race | 1 |
| 211 | Oil Deflector | 1 |

(1) Design replaced in 1994 with standard 3-piece design.

Maintenance Parts

| Size OtN | "C"-Face Input | | | "AP" Input Shaft | | | "AD" Backstop Assembly | | | |
|-------------|----------------|------|------------|------------------|------|------------|------------------------|------|------------|------------|
| | 67 | 68 | 96 | 67 | 68 | 96 | 67 | 68 | 96 | 207 |
| 22 | 6305 RS | 6205 | 25x40x8 AS | 6305 RS | 6304 | 20x30x7 AS | 6305 RS | 6304 | 20x30x7 AS | BWX133590A |
| 23 | 6305 RS | 6205 | 25x40x8 AS | 6206 RS | 6304 | 20x30x7 AS | 6206 RS | 6304 | 20x30x7 AS | BWX133590A |

Reducers
OtN 22...28

**Gearmotors
"Modular" Integral Input Style Parts List**

| Part # | Description | Qty. |
|---------------|---------------------|-------------|
| 1 | "MP" Housing | 1 |
| 2 | Level/Breather Plug | 3 |
| 3 | Plug Seal Washer | 3 |
| 4TD | Bearing Cap | 1 |
| 5TD | Socket Head Screw | 3 |
| 6TD | Ball Bearing | 1 |
| 4 | Bearing Cap * | 1 |
| 5 | Hex Head Screw | 4 |

* Sizes 22-26 standard design converted to snap ring 1/98.

| Part # | Description | Qty. |
|---------------|--------------------|-------------|
| 7 | Input Shaft | 1 |
| 8 | Ball Bearing | 1 |
| 9 | Retaining Ring | 1 |
| 10 | Oil Seal | 1 |
| 11 | Oil Deflector | 1 |
| 12 | Pinion Pin | 1 |
| 13 | Pinion Key | 1 |
| 14 | Retaining Ring | 1 |
| 15 | Hex Head Screw | 4 |
| 16 | Pinion | 1 |

Maintenance Parts

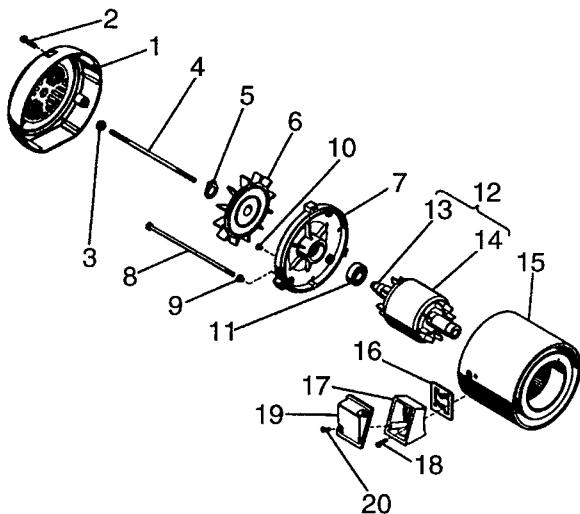
| OtN Size | Part Number | |
|---------------------|--------------------|-------------------------------|
| | 8 | 10 (inches) |
| 22, 23 | 6206 2RS | 1.156 x 1.878 x .25 Metal OD |
| 24, 25 | 6207 2RS | 1.375 x 2.004 x .375 Metal OD |
| 26, 27 | 6210 2RS | 1.937 x 2.754 x .312 Metal OD |
| 28 | 6213 Z | 2.50 x 3.376 x .375 Metal OD |



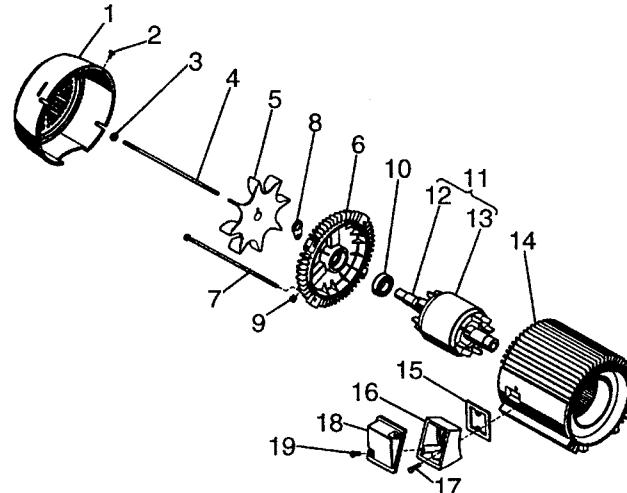
OtN Series 2000

Gearmotors

UTP, UTEP, UTIP Integral "Modular" Motor Parts List



Frames 56, 140T



Frames 180T, 210T, 250T, A280T

| Part # | Description | Qty. |
|--------|---|------|
| 1 | Fan Cover | 1 |
| 2 | Self Tapping Screw | 3 |
| 3 | Hex Nut | 1 |
| 4 | Stud | 1 |
| 5 | Retaining Snap Ring | 1 |
| 6 | Fan | 1 |
| 7 | Bracket | 1 |
| 8 | Screw | 4 |
| 9 | Bushing | 4 |
| 10 | Plastic Plug | 4 |
| 11 | Ball Bearing | 1 |
| 12 | Rotor Assembly (includes items 13 & 14) | 1 |
| 13 | Shaft | 1 |
| 14 | Rotor Core | 1 |
| 15 | Wound Stator Assembly | 1 |
| 16 | Gasket | 1 |
| 17 | Outlet Box Base | 1 |
| 18 | Self Tapping Screw | 2 |
| 19 | Outlet Box Cover | 1 |
| 20 | Self Tapping Screw | 2 |

| Part # | Description | Qty. |
|--------|---|------|
| 1 | Fan Cover | 1 |
| 2 | Self Tapping Screw | 4 |
| 3 | Hex Nut | 1 |
| 4 | Stud | 1 |
| 5 | Fan | 1 |
| 6 | Bracket | 1 |
| 7 | Hex Head Bolt | 4 |
| 8 | Lifting Lug | 1 |
| 9 | Hex Countersunk Pipe Plug | 2 |
| 10 | Ball Bearing | 1 |
| 11 | Rotor Assembly (includes items 12 & 13) | 1 |
| 12 | Shaft | 1 |
| 13 | Rotor Core | 1 |
| 14 | Wound Stator Assembly | 1 |
| 15 | Gasket | 1 |
| 16 | Outlet Box Base | 1 |
| 17 | Self Tapping Screw | 2 |
| 18 | Outlet Box Cover | 1 |
| 19 | Self Tapping Screw | 2 |



OtN Series 2000

Gearmotors

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